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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/667,398	09/23/2003	Marie-Christine Piedboeuf	86331-11	9362

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EXAMINER
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EASHOO, MARK

ART UNIT	PAPER NUMBER
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1732

DATE MAILED: 08/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

8

<b>Office Action Summary</b>	<b>Application No.</b> 10/667,398	<b>Applicant(s)</b> PIEDBOEUF, MARIE-CHRISTINE	
	<b>Examiner</b> Mark Eashoo, Ph.D.	<b>Art Unit</b> 1732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 May 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3 and 5-40 is/are pending in the application.
- 4a) Of the above claim(s) 18-37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-17 and 38-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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## DETAILED ACTION

### *Election/Restrictions*

This application contains claims 18-37 drawn to an invention nonelected with traverse in the reply filed on 14-NOV-2005. These claims remain withdrawn from consideration.

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 16 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, claim 16 appears to add a limitation directed to the manufacturing of a plastic article, but, since the claim does not set forth any steps involved in the method/process of making the specific article, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 17 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Specifically, claim 17 appears to add a limitation directed to the manufacturing of a plastic kayak, but, since the claim does not set forth any steps involved in the method/process of making the specific article or kayak, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5-11, 14, and 38-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Horner (US Pat. 4,093,188) when taken with Fitzhugh, Jr. et al. (US Pat. 3,743,250).

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Regarding claim 1 and 39: Horner teaches the claimed process of creating color effects in an extrudable material, comprising: providing a first flow of viscous material having a first color (8:50-9:10); providing a second flow of viscous material having a second color different from the first color (8:50-9:10); combining first and second flows in an adjacent manner to form a stream (8:50-9:10); and feeding the stream through a static mixer to form a third color (8:50-9:10).

It is noted that the above citations in Horner clearly refer a comparison of Horner's mixer to that of the "Fitzhugh patent" (US Pat. 3,742,250). Since the prior art must be considered for all that it teaches, it is submitted that that Horner explicitly teaches that Fitzhugh, which uses a helical static mixer of a predetermined length (ie. dividing, overturning and combining a predetermined number of times), forms incomplete mixing of two colored streams such that "significant gradations of color" or bands/streaks are formed. As such, the extremely large breadth of the instantly claimed limitations are taught by Horner.

Regarding claims 2-3, 9-11: Horner teaches a gradation of color, or a varying mixture (eg. pink), between many/multiple red and white areas (8:50-9:10). As such it is inherent that the gradation of color occurs between the two colors.

Regarding claims 5-7 and 40: The examiner recognizes that all of the claimed effects and physical properties are not positively stated by the reference(s). However, the reference(s) teaches all of the claimed ingredients, process steps, and process conditions. Therefore, the claimed effects (ie. horizontal layers, vertical layers, diagonal layers, or concentric layers) and physical properties would *inherently* be achieved by carrying out the disclosed process. If it is applicants' position that this would not be the case: (1) evidence would need to be presented to support applicants' position; and (2) it would be the examiner's position that the application contains inadequate disclosure that there is no teaching as to how to obtain the claimed properties and effects by carrying out only these process steps.

Furthermore, the examiner notes that no relative relationship (eg. observer position) is given to the layer orientations. Therefore, the limitations horizontal, diagonal, and vertical are effectively very broad limitations and merely require bands to be present in the product in some manner since the relative orientation of the extrudate can be changed to meet horizontal or vertical. The concentric limitation is essentially met using the same rationale, but the examiner notes that a person of ordinary skill in the art is quite aware that the mixing in a static mixer creates turbulent flow for mixing which inherently creates eddies or swirl patterns (eg. concentric flows). It is submitted that these swirl/concentric patterns would inherently be part of the observed patterns having "significant gradation of color with many dark red and distinctly white areas".

Regarding claim 8 and 38: Horner teaches a helical /spiral mixer of a predetermined length (8:50-9:10 and 1:60-2:7).

Regarding claim 14: Horner teaches polymeric/plastic fluids (1:34-51).

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Claims 1, 12, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Bambara et al. (US Pat. 5,998,006).

Regarding claim 1: Bambara et al. teaches the claimed process of creating color effects in an extrudable material, comprising: providing a first flow of viscous material having a first color (1:24-55, 3:5-30 and Fig. 1); providing a second flow of viscous material having a second color different from the first color (1:24-55, 3:5-30 and Fig. 1); combining first and second flows in an adjacent manner to form a stream (Fig. 1, elements 20, 24); and feeding the stream through a static mixer (ie. a breaker plate) to form a third color (Fig. 1, elements 18 and 4; see also Fig. 4).

It is inherent that the colorants are blended to some degree to form a color between the base color and the colorant (or mixtures of colorants and a base color) since, Bambara et al. teaches that the colorants are not thoroughly mixed to form a homogeneous mixture (9:35-45). Furthermore, since that colors are provided by injectors up stream of a breaker plate (Figs. 1-2) it is submitted that individual flows of the injected colors would be inherent therein until turbulent mixing is caused by the breaker plate. It is noted that a breaker plate inherently divides the flow pattern and causes turbulent mixing.

Regarding claim 12: Bambara et al. teaches forming a sheet (3:25-30 and Fig. 4).

Regarding claim 13: Bambara et al. teaches forming a tube or an annular profile (3:25-30).

Claims 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Bambara et al. (US Pat. 5,998,006).

Regarding claim 15: Bambara et al. teaches the claimed process of creating color effects in an extrudable material, comprising: providing a first flow of viscous material having a first color (1:24-55, 3:5-30 and Fig. 1); providing a second flow of viscous material having a second color different from the first color (1:24-55, 3:5-30 and Fig. 1); combining first and second flows in an adjacent manner to form a stream (Fig. 1, elements 20, 24); and feeding the stream through a static mixer (ie. a breaker plate) to form a third color (Fig. 1, elements 18 and 4; see also Fig. 4).

It is inherent that the colorants are blended to some degree to form a color between the base color and the colorant (or mixtures of colorants and a base color) since, Bambara et al. teaches that the colorants are not thoroughly mixed to form a homogeneous mixture (9:35-45). Also, it is noted that Fig. 4 shows a sheet of material that substantially has a gradation of colors. Furthermore, since that colors are provided by injectors up stream of a breaker plate (Figs. 1-2) it is submitted that individual flows of the injected colors would be inherent therein until turbulent mixing is caused by the breaker plate. It is noted that a breaker plate inherently divides the flow pattern and causes turbulent mixing.

Regarding claims 16-17: Each claim recites an intended use of the sheet material formed by claim 15 and does not clearly add another process step of forming the sheet into the article recited by the instant claims. Nonetheless, the following comments apply. With respect to claim 16, Bambara et al. teaches that plastic

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articles are formed by the extruded article of Bambara et al. (1:5-20). With respect to claim 17, Bambara et al. clearly teaches a that various water sport articles are formed by the extruded article of Bambara et al. (1:5-20), therefore, it is submitted that use of the extrudate sheet to form a kayak is at least implicitly encompassed by the teachings Bambara et al.

*Response to Arguments*

Applicant's arguments filed 09-MAY-2006 have been fully considered but they are not persuasive. Applicant's arguments have been substantially responded to in the above rejection.

*Correspondence*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Eashoo, Ph.D. whose telephone number is (571) 272-1197. The examiner can normally be reached on 7am-3pm EST, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on (571) 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Mark Eashoo, Ph.D.  
Primary Examiner  
Art Unit 1732

me  
July 27, 2006

21/Jul/06